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AN EXELON COMPANY

June 13, 2022

ComEd 2022 Summer Preparedness ICC Policy Session

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Our Shared Objectives



**Resilient Grid and
Dependable Service**



**Affordability and
Equitable Access**

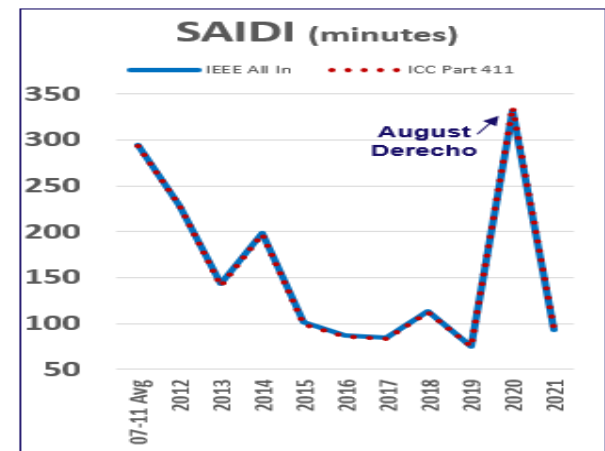
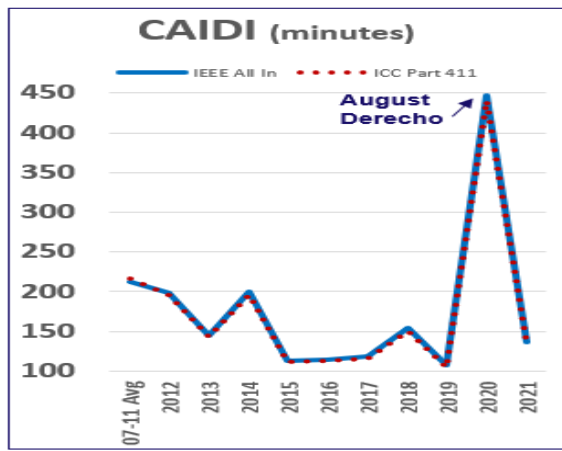
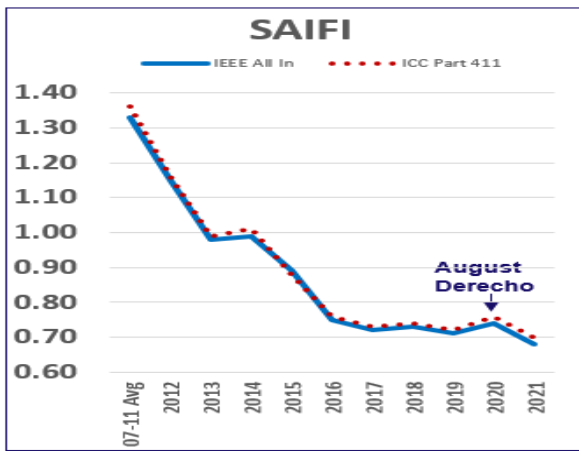
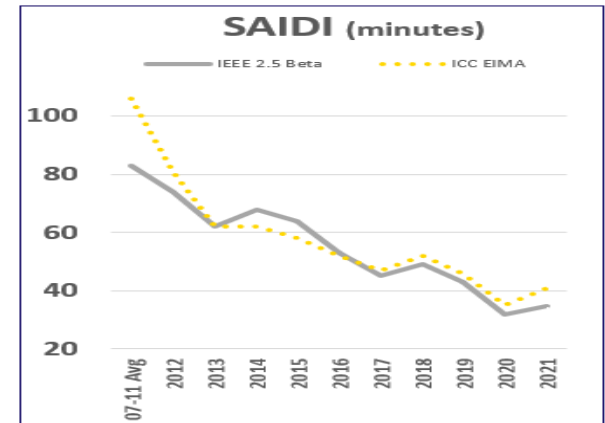
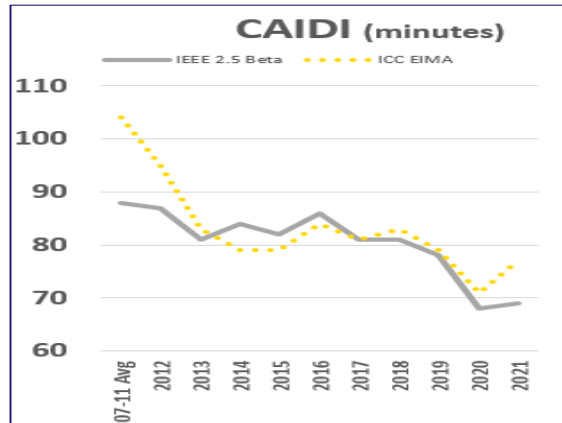
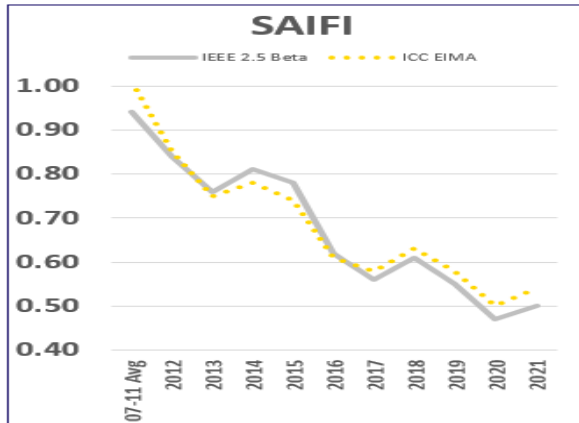


Clean Energy Future

Reliability is Key to a Clean Energy Future

ComEd continues to drive down the frequency and duration of customer outages

- SAIFI improved by 49%, finishing best on record in 2021, CAIDI improved by 38%, best on record excluding reportable storms and SAIDI improved by 68%
- Bottom charts demonstrate the **enormous** impact on year-end results from a single catastrophic storm



Reporting Definitions (IEEE and ICC definitions):

SAIDI – System Average Interruption Duration Index = product of System Average Interruption Frequency Index (SAIFI) x Customer Average Interruption Duration Index (CAIDI)

IEEE All In – Excludes planned interruptions and interruptions <5 minutes

IEEE 2.5 Beta – Same exclusions as IEEE All In, and also excludes 2.5 Beta Major Event Days (MEDs)

ICC Part 411 – Excludes interruptions that are customer related, planned interruptions, other retail electric supplier or utility related, requested by fire or police dept or requested by municipal authority, and interruptions <1 minute

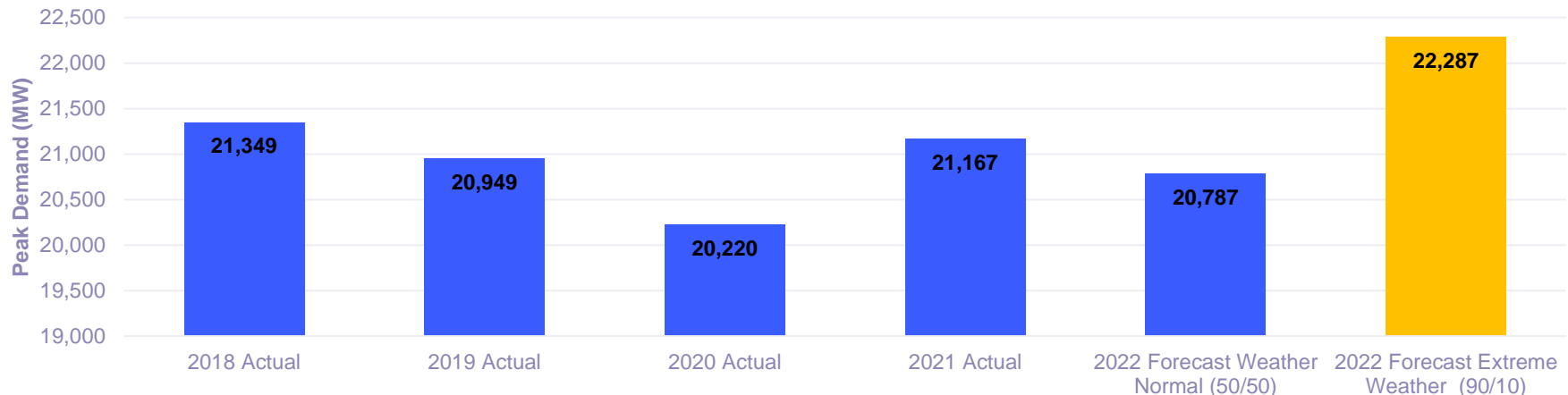
ICC EIMA – Same exclusions as ICC Part 411, and also excludes up to 9 Extreme Weather Event Days (EWEDs) per year

Dependable Grid to Meet Summer 2022 Demand

ComEd is well positioned to provide reliable service during the summer

Peak Load Performance and Forecast

ComEd All-Time System Peak was 23,753 MW in 2011



2022 Load Performance & Summer Forecast

- PJM forecasted peak load for 2022 is 22,287 MW (90/10), 20,787 MW (50/50) for normal weather
 - Leaning above average summer temperatures
 - Normal average summer precipitation

Demand Response

- Demand Response potential peak hour reduction is 1,060 MW
- Peak Time Savings program has grown to 349,000 participants, providing 80 MW of demand response
- 67,000 customers enrolled in AC Cycling program, providing 67.6 MW of demand response

Preparing a Resilient Grid for Severe Weather & Climate Risk

Anticipated Illinois climate change scenarios:

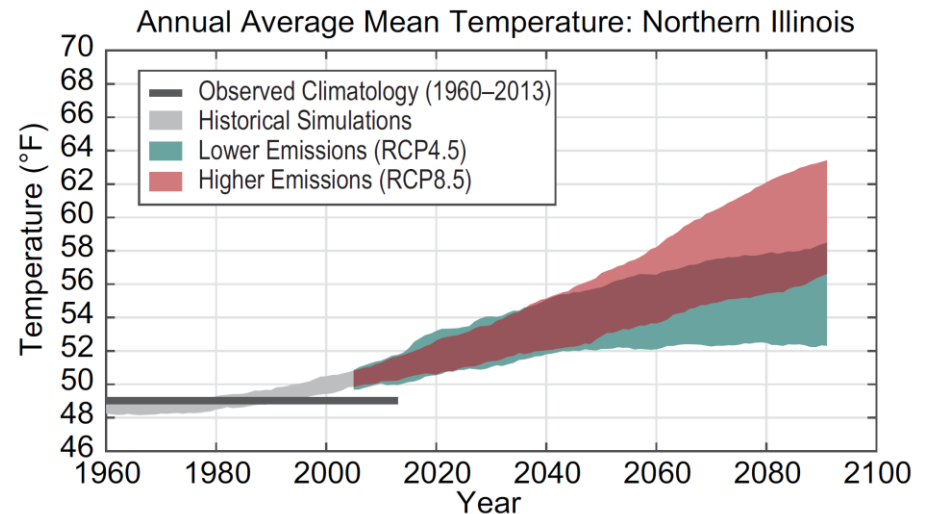
- Warmer average temps
- Wetter springs
- Drier summers
- Extreme heat
- Severe storms



May 18, 2020 – Flooded Chicago River after heavy rain on May 17



August 10, 2020 Derecho – Harvey Transmission Towers



Wuebbles, D., J. Angel, K. Petersen, and A.M. Lemke (Eds.), 2021: An Assessment of the Impacts of Climate Change in Illinois. The Nature Conservancy, Illinois.

Weathering the Impacts of Climate Change

ComEd, Argonne National Lab and Electric Power Research Institute (EPRI)
collaborate on adaptation study

Mitigation

Renewable DER interconnection

Transportation electrification

Industrial decarbonization

Energy efficiency

Adaptation

Changing design standards

Demand response

Equipment hardening

Vegetation management

Storm response

Installing weather stations

Building a Clean Energy Future through Partnerships

Demonstrating and furthering smart grid/emerging technologies through strategic partnerships

- Beneficial electrification
- De-carbonization
- Reliability and resiliency
- Increasing levels of renewables
- Cyber security
- Data analytics and algorithms
- Sensors and control devices
- Behind the meter devices



Solar deployment for residents in Bronzeville



Solar Energy CommUNITY Resiliency (SECURE)



Electric vehicle connected to fast charger

Collaborate with DOE Offices



Establishing a Diverse Ecosystem of Partners



Assuring Preparedness for Summer Storm Season

Edison Electric Institute (EEI) recognized ComEd with two Emergency Response & Recovery Awards for quickly and safely restoring power following the August 2021 storm and for assisting other utilities

Storm Response Improvements

Teams focus on continuous year over year improvement:

- Mutual Assistance Innovation
- Improving customer communication
- Wire Watching
- Damage Assessment/Patrolling
- Vegetation Crew Support
- Crew & Ticket Management
- Employee Engagement

Storm Readiness

- Ensure the five Mobile Command vehicles remain in ready state for deployment
- Spare equipment and flood mitigation plans are in place
- Drone Storm Teams in place to support storm restoration efforts via improved damage assessment capabilities
- Teams trained for Summer Readiness, Load Shed and Black Start, Joint Operations Center and Cyber Response



August 10, 2021 Base Camp Operation – IKEA Schaumburg, IL



August 10, 2021 Woodridge Tornado - Drone Damage Assessment

Emergency Preparedness Operational Exercises/Drills



Mobile Ops Unit at Operation Power Play



Basecamp deployment



Mobile Incident Command – Deployed August 10, 2021

Joint Illinois Partnership

- Regular meetings with Ameren and MidAmerican for Emergency Preparedness coordination

National Response Event (NRE) Functional Exercise

- Regional Mutual Assistance Groups test processes during a worst-case scenario national emergency

Operation Power Play (OPP) 2023

- Preparation for the 2023 Statewide Exercise/Drill for public, private, state, and federal agencies

2022 Drills

- Cyber Security exercise/drill conducted for our Operations Control Center (OCC)
- Completed Summer Readiness drills for Emergency Response Organization Teams
- Over 20 operational readiness exercises/drills are scheduled for 2022

Core Programs to Build a More Resilient Grid

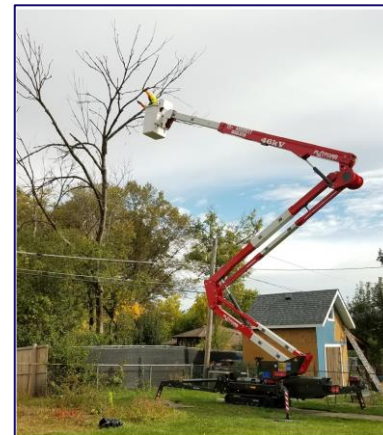
ComEd ensures reliable, resilient, and safe service to our customers through prioritized, coordinated, cost-efficient system-wide solutions



DA testing on E2020

Comprehensive Maintenance Inspection Programs

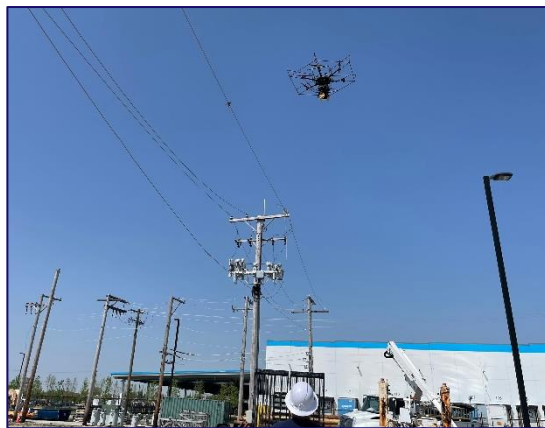
- Training, tooling, and quality assurance continuous improvement to drive effectiveness and affordability
- Imminent Outage Prediction Tool using advanced analytics to increase effectiveness of circuit patrols
- Data analytics and operational intelligence to drive high value/impact preventative maintenance



Dead Ash Tree removal

System Performance Investment

- Distribution Automation provides visibility and operational flexibility resulting in 13M avoided customer interruptions since 2012
- Resiliency programs mitigate outage drivers through application of proactive long-term solutions
- Modernized communications and telemetry systems enhance reliability, resiliency, and enable Distributed Energy Resource (DER) integration



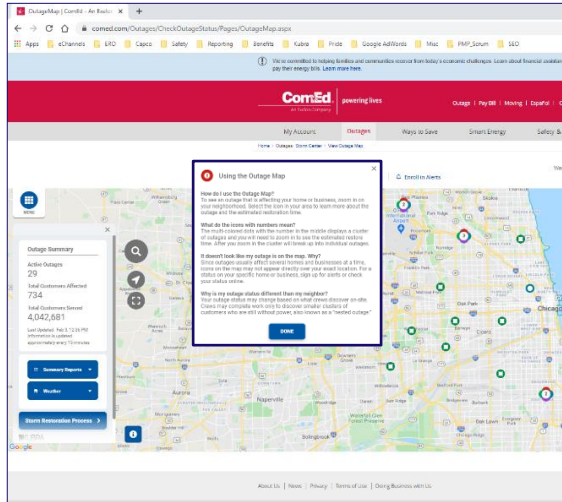
Drone training at ComEd's Chicago Training Center

Proactive Vegetation Management

- Since 2017, mitigated over 75,000 dead and dying Ash Trees due to Emerald Ash Borer epidemic
- Enhanced Trimming and Mid-Cycle Trim programs reduce interruptions
- Targeted Overhang Tree program initiated to address top outage causing tree species with higher susceptibility to climate change
- All planned cyclic distribution and transmission trimming completed

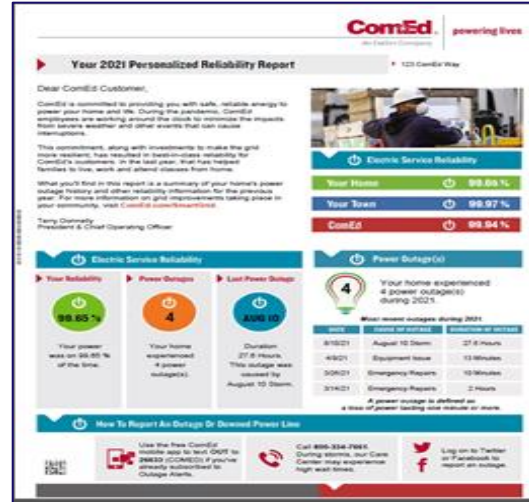
Enabling Equitable Access for Our Customers

ComEd continues to address customer expectations by enabling customers with new solutions that provide increased transparency and improved customer experience, as well as through continued enhancements to system reliability and security



ComEd Municipal Portal

Portal provide enhanced outage map for our municipal and county partners, including subscription to outage alerts, outage notification, estimated restoration times and restoration notifications



Personalized Reliability Report

Annual report educates customers about their personal outages and reliability performance



Smart Assistance Manager

Online, self-service tool uses analytics to match customers with eligible assistance recommendations

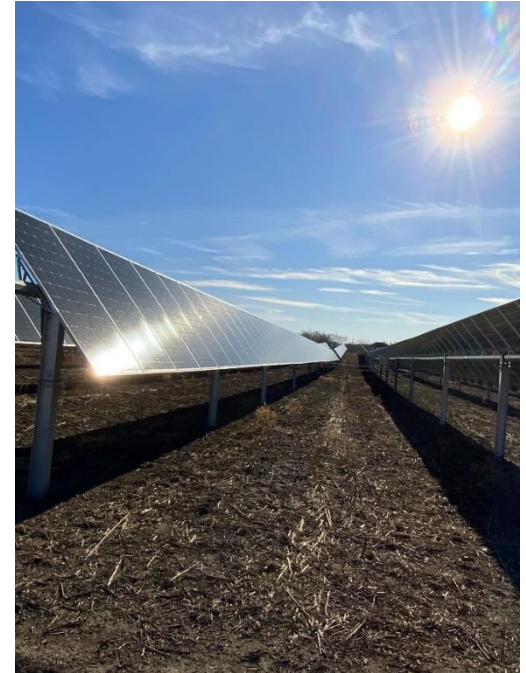
Providing Clean and Affordable Energy Options

Distributed Energy Resources (DER)

- Since the passage of FEJA, the volume of interconnection requests has increased substantially
- ComEd interconnected over 8,800 DER facilities in 2021 representing 174 MW of capacity, including 74 MW of Community Solar; total DER interconnected is over 635 MW
- In 2021, \$49 million in DG Rebates; \$77 million since inception of program, and \$176 million in solar renewable energy credits were paid to eligible facilities, \$299 million in total

Energy Efficiency (EE)

- In 2021, we distributed more than \$219 million in incentives to nearly 460,000 customers, saving them nearly \$982 million on their electric bills
- Received the ENERGY STAR Partner of the Year Award for Sustained Excellence for the 10th consecutive year
- Expanded business and employment opportunities for diverse and local businesses through the EE Service Provider Diverse Incubator Program
- EE Plan 6: ComEd will dedicate on average \$113 million per year towards income eligible customers – nearly 3 times what is required by law (\$40 million)



ComEd customers have saved more than \$6.4 billion on energy bills and avoided 63 billion pounds of carbon through its energy efficiency programs through 2021

Reliable Grid Powers Economic Development

The Economic Development Team helped bring more than **16 new commercial projects** in 2021 to the service territory, including distribution and logistics facilities, manufacturing plants, indoor agriculture farms and **six data centers**, which will create **4,700 new jobs** and generate more than **\$3 billion in customer investments**



New TSS189 Crego Road in DeKalb that serves the Facebook / Meta campus and surrounding area.



New CloudHQ data center campus in Mount Prospect on the former United Airlines headquarters property.



Inside view of Target's new \$100M distribution center in the Little Village neighborhood. The 1.3M square foot facility was constructed on a former brownfield site, the old Crawford Generating Station and created 2,000 new jobs in the area.



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Thank you

